

A NEW GENUS OF HEBRIDAE FROM CHIAPAS AMBER (HETEROPTERA)

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Abstract.—*Stenohebrus glaesarius* NEW GENUS, NEW SPECIES, the only recorded fossil hebrid, is described from Chiapas Amber and compared to modern hebrids.

Key Words.—Insecta, Heteroptera, Hebridae, fossil

The rich collection of fossil insects in Chiapas Amber held by the University of California has provided startling discoveries of previously unknown fossil taxa (Petrunkevitch 1971), which now include the only known fossil hebrid described below. A general account of the fossiliferous amber of Chiapas was given by Hurd et al (1961). The specimen described here was mentioned by Andersen (1982: 252) and illustrated by Poinar (1992: 115) in his book on amber inclusions.

The unique well preserved specimen is enclosed in a small block of amber that has been cut and polished on all sides except the slightly curved surface (designated top) touching or immediately adjacent to the dorsal surface of the insect, parts of which lie at or just beneath the surface at a slight angle (Fig. 1). The top surface is somewhat roughened, pocked and degraded, especially over the vertex of the head and thoracic dorsum, probably because of the proximity of the insect. Additionally there are air inclusions, especially on the dorsal surface of the specimen, which obscure some fine features, in particular those of the abdominal dorsum. These imperfections obliterate or obscure some of the more interesting features of the insect. The left hemelytron is spread or separated from the abdomen, and lies very close to the top surface of the amber block in a quite clear area, thus the venation and the pattern of the membrane are visible. The sternum of the insect (Fig. 2) has a few air inclusions, but most details are quite clearly visible from one of the faceted sides, although the angle of the insect requires turning in various directions to get a clear view of certain fine features (e.g., the bucculae).

The morphological terminology follows that of Andersen (1981, 1982). All measurements are in mm unless otherwise noted.

STENOHEBRUS J. T. POLHEMUS, NEW GENUS (Figs. 1–3)

Type-species: *Stenohebrus glaesarius* J. T. Polhemus, NEW SPECIES

Description.—Macropterous form: Small, elongate oval, pubescence not visible. Length, 1.83 mm, width 0.67 mm. Head long, porrect, only slightly declivent but narrowed anteriorly, large ventral lobe projecting anteriorly; antennal tubercles very large, produced laterally to outer eye level; dorsal trichobothria not visible; vertex obscured. Eyes globose, exserted, very prominent, adjacent to pronotum, ommatidia large, coarsely faceted, about 30 in number, ocular setae not visible; ocelli obscured. Antennae approximately half as long as body; segment 1 stout, shorter than head; segment 2 more slender, about ½ as long as 1; segments 3 and 4 long, flagelliform, set with scattered long setae, without obvious spines. Venter of head with long carinate bucculae, strongly developed, produced posteriorly (Fig. 3, arrow); labium long, reaching beyond posterior coxae. Thoracic dorsum mostly obscured. Pronotum longest on midline, strongly bilobed, humeri prominent. Paired ventral thoracic carinae

well developed, parallel throughout, continuing separately onto base of abdomen. Femora stout, unarmed; tibia slender, unarmed except for spur of stiff setae distally; tarsi 2 segmented, first segment shortest, second segment distally set with long setae. Claws long, very slender, with prominent basal spur; arolia, parempodia not evident. Abdomen longer than broad, not depressed ventrally. Female first gonocoxae large, prominent, typical of *Hebrus* spp.

Diagnosis.—This genus differs from known extant hebrids by the protuberant eyes, strongly laterally produced antennal tubercles, long slender claws, and apparent lack of arolia. *Stenohebrus* is most similar to *Hebrometra* Cobben, sharing the basal spur on the claws, but in the latter the rostral cavity is closed posteriorly and the bucculae are reduced, not produced posteriorly, whereas in *Stenohebrus* the rostral cavity is open posteriorly, and the bucculae are well developed and strongly produced posteriorly.

Discussion.—In Andersen's (1981) key to the genera and subgenera of Hebridae, *Stenohebrus* keys to couplet 9, where the laterally produced antennal tubercles ally it with *Hebrus* subgenus *Timasielliodes* Poisson from the Ethiopian and Oriental regions, but other features discussed above place it closer to *Hebrometra* Cobben. The head is produced anteriorly as in *Hyrceanus* Distant.

Etymology.—The name *Stenohebrus* is derived from *stenos*, Gr. Narrow, and the nominate genus *Hebrus*. Masculine.

Material Examined.—*Stenohebrus glaesarius*.

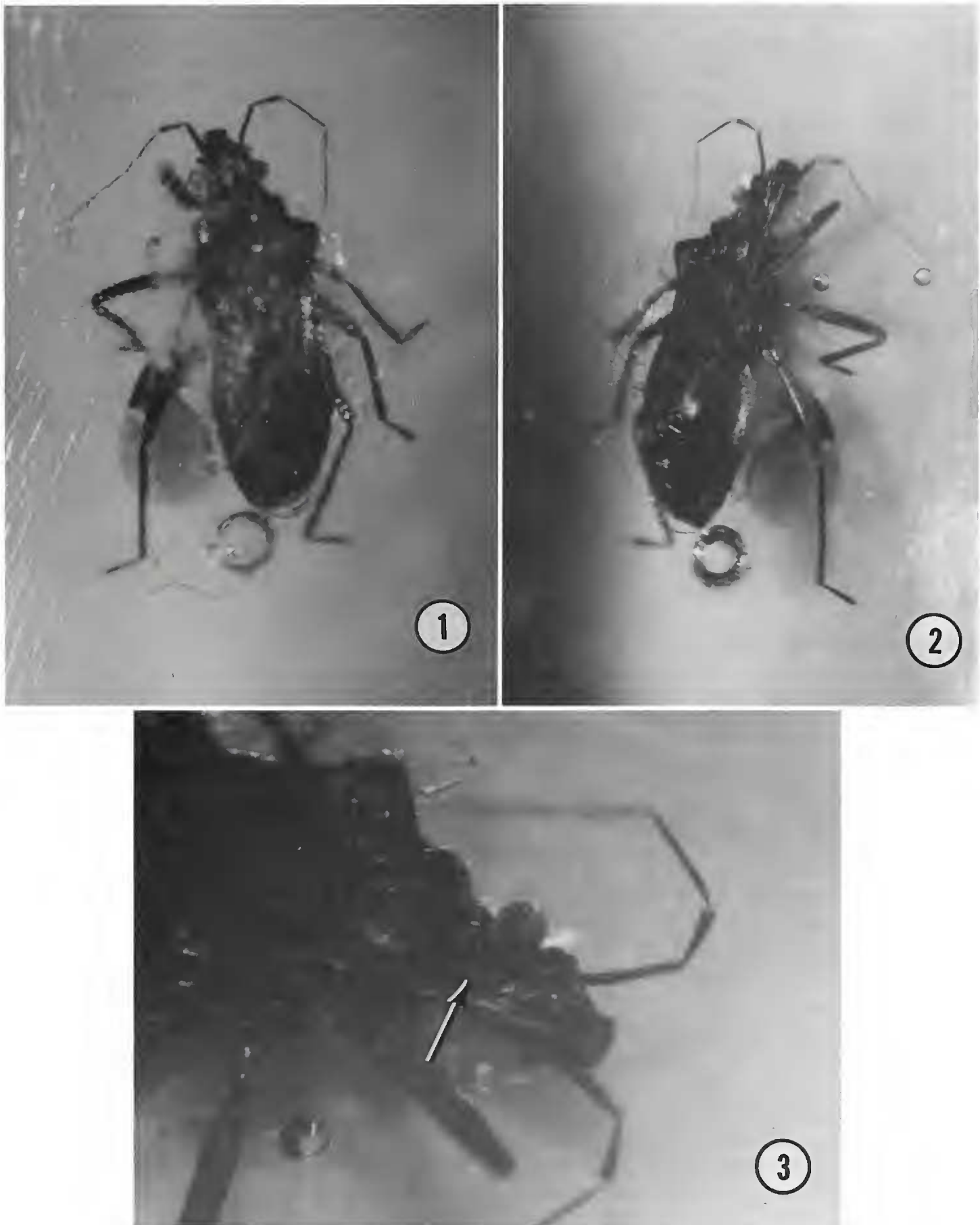
STENOHEBRUS GLAESARIUS J. T. POLHEMUS, NEW SPECIES
(Figs. 1–3)

Type.—Holotype, macropterous female, data: MEXICO. Chiapas Amber, U. C. Mus. Paleo. No. 12894, Oligocene-Miocene boundary, in Paleontological Museum, University of California, Berkeley.

Description, Macropterous Female.—(See generic description; only additional details given here.): Elongate, apparent ground color brownish black; legs, rostrum, antennae brownish. Eyes brown, moderately large, strongly exerted, coarsely faceted. Structural characteristics: Head long, porrect, only slightly declivent anteriorly; median length (from above) 0.30 mm, width across antennal tubercles 0.28 mm; width across eyes, 0.28 mm; vertex mostly obscured. Eyes moderately large, exerted, with about 30 ommatidia; width of an eye: interocular space, 0.06: 0.16. Ocelli obscured. Antennae long, slender, segment I stoutest, abruptly widened basally, then parallel sided; segment II more slender basally, widening distally; segments III–V long, slender, with scattered long setae; length of segments I–V: 0.18 mm: 0.14 mm: 0.26 mm: 0.11 mm: 0.26 mm (separation between IV–V broad, indistinct). Rostrum extending between hind coxae. Bucculae very prominent, produced posteriorly. Pronotum long, length approximately 0.35 mm, constricted medially, dorsal sculpturing obscured. Collar prominent, set off with a row of pits. Mesoscutellum short, length 0.05 mm. Metanotal elevation triangular, rounded distally, shallowly notched distally; median carina not visible; length 0.16 mm, width 0.30 mm. Legs slender, covered with short setae plus tibia distally set with long stiff setae; distal extreme of all tibia set with a short curved spur of closely packed setae; proportions as follows: femur, tibia, tarsal 1, tarsal 2 of fore leg, 0.35: 0.37: 0.03: 0.12; of middle leg, 0.41: 0.41: 0.03: 0.14; of hind leg, 0.53: 0.53: 0.03: 0.15. Hemelytra long, reaching tip of abdomen; hind wings obscured; clavus lightly tinged with brown; corium smoky, indistinct; membrane fumose, with lighter spot near distal angle of closed proximal cell; costal margin set with outwardly directed stiff setae. Abdominal venter sparsely clothed with short appressed setae. First gonocoxae large, plate-like, covering all but triangular proc-tiger.

Diagnosis.—Genus monotypic, see that diagnosis.

Discussion.—The slender claws with a prominent basal spur are similar to semiaquatic Heteroptera living on damp earth or hygropetric habitats, e.g., *He-*



Figures 1–3. *Stenohebrus glaesarius*. Figure 1. Dorsal view. Figure 2. Ventral view. Figure 3. Ventral view, detail; posteriorly produced bucculae, arrow.

brometra spp., *Ochterus* spp., thus it seems likely that this species ranged away from the waters edge.

Etymology.—The name *glaesarius*, L., of amber, refers to the origin of the species in Chiapas Amber.

Material Examined.—See type.

ACKNOWLEDGMENT

I am indebted to the late P. D. Hurd Jr. of the University of California, Berkeley, and more recently the Smithsonian Museum, for the opportunity to study this interesting fossil.

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